BLACK BOX
NETWORK SERVICES

APRIL 2008

LMC5202A

2-Slot Desktop Chassis (DC) Extended Temperature

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50-80105BB-01 A0

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CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S.: **877-877-BBOX** (outside U.S. call **724-746-5500**)
FREE technical support, 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**
Mail order: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: **www.blackbox.com** • E-mail: **info@blackbox.com**

FCC and Industry Canada RF Interference Statements

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Safety Certifications

UL/CUL: Listed to Safety of Information Technology Equipment, including Electrical Business Equipment.

Class 1 Laser product, Luokan 1 Laserlaite, Laser Klasse 1, Appareil A'Laser de Classe 1

European Directive 2002/96/EC (WEEE) requires that any equipment that bears this symbol on product or packaging must not be disposed of with unsorted municipal waste. This symbol indicates that the equipment should be disposed of separately from regular household waste. It is the consumer's responsibility to dispose of this and all equipment so marked through designated collection facilities appointed by government or local authorities. Following these steps through proper disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about proper disposal, please contact local authorities, waste disposal services, or the point of purchase for this equipment.

Electrostatic Discharge Precautions

Electrostatic discharge (ESD) can cause damage to your add-in modules. Always observe the following precautions when installing or handling an add-in module or any board assembly.

1. Do not remove unit from its protective packaging until you're ready to install it.
2. Wear an ESD wrist grounding strap before handling any module or component. If you do not have a wrist strap, maintain grounded contact with the system unit throughout any procedure requiring ESD protection.
3. Hold boards by the edges only; do not touch the electronic components or gold connectors.
4. After removal, always place the boards on a grounded, static-free surface, ESD pad or in a proper ESD bag. Do not slide the board over any surface.

WARNING! Integrated circuits and fiber optic components are extremely susceptible to electrostatic discharge damage. Do not handle these components directly unless you are a qualified service technician and use tools and techniques that conform to accepted industry practices.

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About the 2-Slot Desktop Chassis (DC)

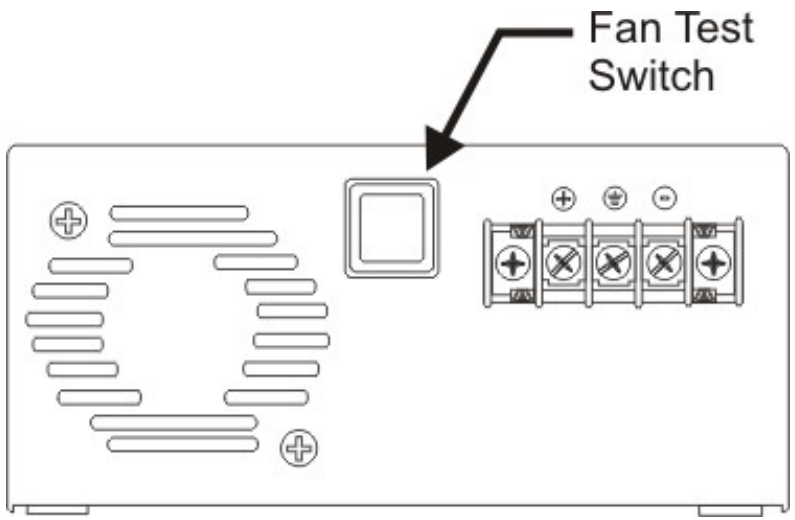
The 2-Slot Desktop Chassis (DC) is a stand-alone, chassis for use with any of the High Density Media Converter II modules. As an unmanaged chassis, the 2-Slot Desktop Chassis (DC) supports two single-wide or one dual-wide High Density Media Converter II Module. All High Density Media Converter II modules, with the exception of the SNMP management card, will function properly in this chassis.

The 2-Slot Desktop Chassis (DC) contains an internal internal Telco compatible DC power supply.

The 2-Slot Desktop Chassis (DC) includes a temperature triggered fan. When the internal temperature of the chassis reaches 86° F (30° C) the fan is activated. As the temperature increases the fan drive duty cycle adjusts to increase the fan speed. You can test the fan operation by depressing the fan test switch on the back of the chassis.

Part Number

LMC5202A	2-Slot Desktop Chassis (DC)



Included Accessories

1 Operation Manual
2 Screws for Wall Mounting

Specifications

Environmental:
Operating Temperature: -31° F to 156.2° F (-35° C to 69° C)
Storage Temperature: -4° F to 158° F (-20° C to 70° C)
Humidity: 5 to 95% (non-condensing)

DC Power Supply:
Input voltage: 35 to 60 VDC
Input Current: 2.7A maximum @35 VDC, Full Load
Output Current Capability: 15A @5 VDC

Dimensions:
2.23″H x 4.75″W x 7.30″D (5.7 cm H x 12.1 cm W x 18.6 cm D)

Heat Generation:
30 BTU/hr. maximum
Fan turns on if the internal temperature exceeds 86° F (30° C)

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Web site: www.blackbox.com

E-mail: info@blackbox.com

DC Power Supply Precautions

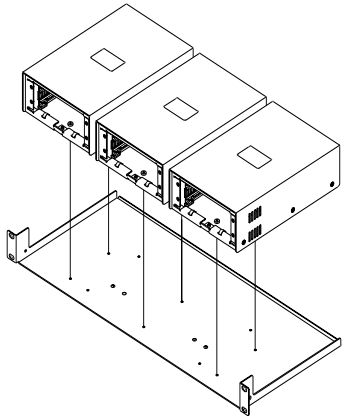
The following precautions must be observed when installing the chassis model with an internal DC power supply.

1. Check nameplate ratings to ensure there is no overloading of supply circuits that could effect over current protection and supply wiring.
2. In addition, the following must be observed:
   a. Connect the equipment to a 35 to 60 VDC power source that is electrically isolated from the alternating current source.
   b. Route input wiring to terminal block and secure in such a manner that it is protected from damage and stress. Do not route wiring past sharp edges or moving parts.
   c. Incorporate a readily accessible disconnect device, with a 3mm minimum contact gap in the fixed wiring.
   d. Install only in Restricted Access Areas (dedicated Equipment Rooms, Equipment closets or the like) in accordance with Articles 110-18, 110-26, and 110-27 of the National Electric Code, ANSI/NFPA 70.
   e. Provide a listed circuit breaker suitable for branch circuit protection of the wiring and rated maximum 1A @ 48 VDC.
   f. For supply connections, use wires suitable for at least 75 ° C.

Installing the 2-Slot Desktop Chassis (DC)

Use the 2-Slot Desktop Chassis (DC) as a table-top chassis, mount it on a rackmount shelf, or mount it to a wall surface (brackets are not required).

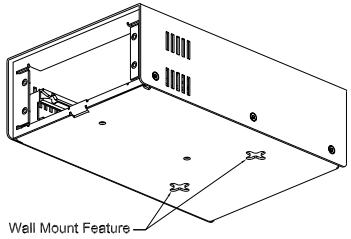
1. Install the 2-Slot Desktop Chassis (DC) by placing it on a flat surface.
2. If mounting on a Rackmount shelf, align screw holes and secure with screws.



The rackmount shelf is sold separately. To purchase the rackmount shelf (part number LMC5238), call Black Box or visit www.blackbox.com

Rackmounting requires a rackmount shelf for mounting up to three units side by side.

3. If mounting the chassis on a wall, place two #10 panhead screws (not supplied) on the wall the distance of the holes on the chassis, and then hang the unit on the screws.



4. Attach the cables between the chassis and the device that will be interconnected, and then plug the unit into a reliable, filtered power source.

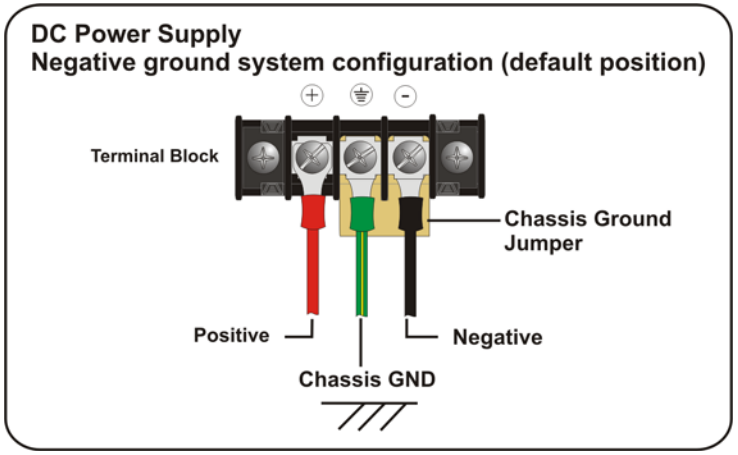
Configuring and Installing Modules

Black Box recommends turning the chassis power off before proceeding.

1. To install a High Density Media Converter II module, slide the module into the chassis until the module is firmly seated in the backplane.
2. Secure the module to the chassis by tightening the captive thumb screw on the High Density Media Converter II module.
3. Attach the network cables between the High Density Media Converter II module and other devices that will be interconnected.
4. Connect the DC power source.

DC Power Supply Wiring Instructions

The following image shows the wiring configuration for a 48 VDC power supply in a negative ground system application. For positive ground system applications remove the chassis ground shorting jumper and connect it between the positive terminal and the chassis ground terminal. Alternatively, the chassis grounding jumper can be eliminated and the chassis ground connected at the power source.



NOTE
Incorrect wiring will result in chassis malfunction. 2-Slot Desktop Chassis (DC) is compliant with Isolated Grounding Plane practices. The POSITIVE and NEGATIVE terminals are isolated from chassis ground and must have a ground reference at the power-sourcing equipment.

This equipment is designed to permit the connection of the grounded conductor of the DC supply circuit to the earthed conductor at the equipment. If this connection is made, all of the following conditions must be met:

1. This equipment shall be connected directly to the DC supply system earthed electrode conductor or to a bonding jumper from a grounded terminal bar or bus to which the DC supply system grounding electrode conductor is connected.
2. This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC supply circuit and the earthing conductor, and also the point of earthing of the DC system. The DC system shall not be earthed elsewhere.
3. The DC supply source shall be located within the same premises as this equipment.
4. Switching or disconnecting devices shall not be in the earthed circuit conductor between the DC source and the point of connection of the earthing electrode conductor.

Rackmount Precautions

1. Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.
2. Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
3. Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
4. Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
5. Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).